

IN THE CLAIMS:

This listing of claims will replace all previous versions, and listings, of claims in the application. Cancellation of claims or cancellation of subject matter within a claim is effected without prejudice.

LISTING OF CLAIMS:

1. (Currently Amended): A photoresist composition consisting essentially of a polymeric binder, a photoactive component, an organic acid selected from the group consisting of a sulfonic acid, a phosphonic acid, oxalic acid, malonic acid, succinic acid, glutaric acid, adipic acid, glycolic acid, tartaric acid, malic acid, phthalic acid, benzene tricarboxylic acid, salicylic acid, cyclohexanecarboxylic acid, 1,4-cyclohexanedicarboxylic acid and sebacic acid and optionally a cross-linking agent, wherein the organic acid is non-polymerizable with the polymeric binder, optional cross-linking agent or both, and is present in an amount of from 0.5 to 5 parts per 40 parts of polymeric binder on a dry weight basis, and wherein the photoactive component is selected from the group consisting of 9-phenylacridine, n-phenylglycine, benzophenone, N,N'-tetramethyl-4,4'-diaminobenzophenone, N,N'-tetraethyl-4,4'-diaminobenzophenone, 4-methoxy-4'-dimethylaminobenzophenone, 3,3'-dimethyl-4-methoxybenzophenone, p,p'-bis(dimethylamino)benzophenone, p,p'-bis(diethylamino)benzophenone, anthraquinone, 2-ethylanthraquinone, naphthaquinone, phenanthraquinone, benzoin, benzoinmethylether, benzoinethylether, benzoinisopropylether, benzoin-n-butylether, benzoin-phenylether, methylbenzoin, ethylbenzoin, dibenzyl, benzyldiphenyldisulfide, benzyldimethylketal, 1,7-bis(9-acridinyl)heptane, 2-chlorothioxanthone, 2-methylthioxanthone, 2,4-diethylthioxanthone, 2,4-dimethylthioxanthone, 2-isopropylthioxanthone, 1,1-dichloroacetophenone, p-t-butylchloro-acetophenone, 2,2-

diethoxyacetophenone, 2,2-dimethoxy-2-phenylacetophenone, 2,2-dichloro-4-phenoxyacetophenone, 2-(o-chlorophenyl)-4,5-diphenylimidazole dimer, 2-(o-chlorophenyl)-4,5-di(m-methoxyphenyl)imidazole dimer, 2-(o-fluorophenyl)-4,5-diphenylimidazole dimer, 2-(o-methoxyphenyl)-4,5-diphenylimidazole dimer, 2-(p-methoxyphenyl)-4,5-diphenylimidazole dimer, 2,4-di(p-methoxyphenyl)-5-phenylimidazole dimer, 2-(2,4-dimethoxyphenyl)-4,5-diphenylimidazole dimer and 2-(p-methylmercaptophenyl)-4,5-diphenylimidazole dimer.

2. – 5. (Cancelled).

6. (Original): The composition of claim 1 wherein the photoresist is negative-acting.

7. (Cancelled).

8. (Previously Presented): The composition of claim 1 wherein the polymeric binder comprises sufficient acid functionality to render said photoresist composition developable in alkaline aqueous solution.

9. (Original): The composition of claim 8 wherein the polymeric binder has an acid number of from about 50 to about 250.

10. (Previously Presented): The composition of claim 1 wherein the organic acid is present in an amount up to 10 wt %, based on the total dry weight of the polymeric binder.

11. (Previously Presented): The composition of claim 10 wherein the organic acid is present in an amount up to 8 wt %, based on the total dry weight of the polymeric binder.

12. (Currently Amended): A method of enhancing the removal of a photoresist composition from a substrate ~~consisting essentially of~~ comprising the step of combining an organic acid selected from the group consisting of a sulfonic acid, a phosphonic acid, oxalic acid, malonic acid, succinic acid, glutaric acid, adipic acid, glycolic acid, tartaric acid, malic acid, phthalic acid, benzene tricarboxylic acid, 1,4-cyclohexanedicarboxylic acid and sebacic acid with a photoresist composition ~~comprising~~ consisting essentially of a polymeric binder, a photoactive component, and optionally a cross-linking agent, wherein the organic acid is non-polymerizable with the polymeric binder, optional cross-linking agent or both, and is present in an amount of from 0.5 to 5 parts per 40 parts of polymeric binder on a dry weight basis, and wherein the photoactive component is selected from the group consisting of 9-phenylacridine, n-phenylglycine, benzophenone, N,N'-tetramethyl-4,4'-diaminobenzophenone, N,N'-tetraethyl-4,4'-diaminobenzophenone, 4-methoxy-4'-dimethylaminobenzophenone, 3,3'-dimethyl-4-methoxybenzophenone, p,p'-bis(dimethylamino)benzophenone, p,p'-bis(diethylamino)-benzophenone, anthraquinone, 2-ethylanthraquinone, naphthaquinone, phenanthraquinone, benzoin, benzoinmethylether, benzoinethylether, benzoinisopropylether, benzoin-n-butylether, benzoin-phenylether, methylbenzoin, ethylbenzoin, dibenzyl, benzyldiphenyldisulfide, benzyldimethylketal, 1,7-bis(9-acridinyl)heptane, 2-chlorothioxanthone, 2-methylthioxanthone, 2,4-diethylthioxanthone, 2,4-dimethylthioxanthone, 2-isopropylthioxanthone, 1,1-dichloroacetophenone, p-t-butylchloroacetophenone, 2,2-diethoxyacetophenone, 2,2-dimethoxy-2-phenylacetophenone, 2,2-dichloro-

4-phenoxyacetophenone, 2-(o-chlorophenyl)-4,5-diphenylimidazole dimer, 2-(o-chlorophenyl)-4,5-di(m-methoxyphenyl)imidazole dimer, 2-(o-fluorophenyl)-4,5-diphenylimidazole dimer, 2-(o-methoxyphenyl)-4,5-diphenylimidazole dimer, 2-(p-methoxyphenyl)-4,5-diphenylimidazole dimer, 2,4-di(p-methoxyphenyl)-5-phenylimidazole dimer, 2-(2,4-dimethoxyphenyl)-4,5-diphenylimidazole dimer and 2-(p-methylmercaptophenyl)-4,5-diphenylimidazole dimer.

13. – 16. (Cancelled).

17. (Original): The method of claim 12 wherein the photoresist is negative-acting.

18. (Currently Amended): A method of manufacturing a printed wiring board ~~consisting essentially of~~ comprising the steps of a) disposing on a printed wiring board substrate a photoresist composition ~~comprising~~ consisting essentially of a polymeric binder, a photoactive component, an organic acid selected from the group consisting of a sulfonic acid, a phosphonic acid, oxalic acid, malonic acid, succinic acid, glutaric acid, adipic acid, glycolic acid, phthalic acid, benzene tricarboxylic acid, salicylic acid, cyclohexanecarboxylic acid, 1,4-cyclohexanedicarboxylic acid and sebacic acid and optionally a cross-linking agent, wherein the organic acid is non-polymerizable with the polymeric binder and optional cross-linking agent, and is present in an amount of from 0.5 to 5 parts per 40 parts polymeric binder on a dry weight basis, and wherein the photoactive component is selected from the group consisting of 9-phenylacridine, n-phenylglycine, benzophenone, N,N'-tetramethyl-4,4'-diaminobenzophenone, N,N'-tetraethyl-4,4'-diaminobenzophenone, 4-methoxy-4'-

dimethylaminobenzophenone, 3,3'-dimethyl-4-methoxybenzophenone, p,p'-bis(dimethylamino)benzophenone, p,p'-bis(diethylamino)-benzophenone, anthraquinone, 2-ethylanthraquinone, naphthaquinone, phenanthraquinone, benzoin, benzoinmethylether, benzoinethylether, benzoinisopropylether, benzoin-n-butylether, benzoin-phenylether, methylbenzoin, ethylbenzoin, dibenzyl, benzyldiphenyldisulfide, benzyldimethylketal, 1,7-bis(9-acridinyl)heptane, 2-chlorothioxanthone, 2-methylthioxanthone, 2,4-diethylthioxanthone, 2,4-dimethylthioxanthone, 2-isopropylthioxanthone, 1,1-dichloroacetophenone, p-t-butyl-dichloro-acetophenone, 2,2-diethoxyacetophenone, 2,2-dimethoxy-2-phenylacetophenone, 2,2-dichloro-4-phenoxyacetophenone, 2-(o-chlorophenyl)-4,5-diphenylimidazole dimer, 2-(o-chlorophenyl)-4,5-di(m-methoxyphenyl imidazole dimer, 2-(o-fluorophenyl)-4,5-diphenylimidazole dimer, 2-(o-methoxyphenyl)-4,5-diphenylimidazole dimer, 2-(p-methoxyphenyl)-4,5-diphenylimidazole dimer, 2,4-di(p-methoxyphenyl)-5-phenylimidazole dimer, 2-(2,4-dimethoxyphenyl)-4,5-diphenylimidazole dimer and 2-(p-methylmercaptophenyl)-4,5-diphenylimidazole dimer; b) imaging the photoresist; and c) developing the photoresist.

19. – 20. (Cancelled).